

I claim:

1. A method for processing used and manufacturing scrap asphalt shingle material into ground cover product, the method comprising the steps of:

5       - shredding said asphalt shingle material into asphalt material flakes;

      - mixing a surface treatment material with the asphalt material flakes; and

      - heating the mixture comprising the surface treatment  
10 material and the asphalt material flakes to a temperature sufficient for the surface treatment material to embed into the surface of the flakes.

2. The method of claim 1 further comprising the steps of:

15       - in said mixing step, mixing a surfactant with the surface treatment material and the asphalt material flakes; and

      - drying the surface treated flakes.

20 3. The method of claim 2 in which said surfactant includes a liquid solvent.



5. A method for processing used and manufacturing scrap asphalt shingle material into ground cover product, the method comprising the steps of:

- providing:

5           - a mixing chamber having an inlet and an outlet;  
          - means for introducing the asphalt flakes into the inlet of the mixing chamber;

- surface treatment material; and

- at least one of:

10           - means for introducing dry surface treatment material into the inlet of said mixing chamber, and

- means for introducing liquid-borne surface treatment material into said mixing chamber;

15           - introducing the asphalt flakes into the inlet of the mixing chamber;

- introducing one of the dry and the liquid-borne surface treatment material into the mixing chamber;

- mixing the asphalt flakes and the surface treatment material in the mixing chamber;

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- heating the mixture in the mixing chamber to a temperature sufficient for the surface treatment material to embed into the surface of the asphalt flakes; and

- discharging the surface treated flakes from the  
5 mixing chamber.

6. The method of claim 5 further comprising the steps of:

- providing both of said means for introducing surface treatment material into the mixing chamber; and

10 - introducing the other of the dry and the liquid-borne surface treatment material into the mixing chamber.

7. The method of claim 5 further comprising the steps of:

- laying the surface treated flakes in a substantially  
15 flat position; and

- forming a mat by compressing the surface treated flakes together.

8. The method of claim 7 further comprising the steps of:

20 - providing a backing material; and  
- attaching the backing material with the compressed flakes.

9. The method of claim 5 further comprising the steps of:

- in said mixing step, mixing a surfactant with the surface treatment material and the asphalt material flakes;

5 and

- drying the surface treated flakes.

10. The method of claim 5 in which said mixing chamber comprises a mixing tube provided with auger flighting for

10 carrying the material therethrough.

1. Apparatus for recycling used/asphalt shingle material  
into a composite board comprising:

a material staging station having an inlet to receive  
shingle material flakes and having an outlet;

5 a processing station receiving the flake material and  
operative to mix and grind the flakes with solvent saffused  
structural fiber;

an extruder receiving the mixed and ground material and  
adapted to provided extruded ground material therefrom;

10 one of a pair of opposing compression rollers and a  
press for compressing the extruded material; and

a cutter positioned to cut the compressed material into  
composite boards.

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